

March-26-15 1:45:19 PM

To ship Sept 11

Page 1

Setup Start *NS1*

Stop *NS2*

Customer:

Approvals: **Process Plan:** MLJ **Date:** 15-03-31 **Tooling:** _____ **Date:** _____ **Run** **Start** ***NR1***
 QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____ **Stop** ***NR2***

[illegible]

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐															
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐															
Large Fab ☐	Composite ☐	Supplier ☐																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Work Order ID 131147

March-26-15 1:45:19 PM

131147

Page 2

Item ID: D412-775-013

Accept

N900040100Setup Start ***NS1***

Revision ID:

Item Name: Step Protective Trim

Stop ***NS2***

Start Date: 3/22/15 Start Qty: 1.00

1

Cust Item ID:

Required Date: 3/26/15 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start ***NR1***

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
110	QC4- 100% Inspect kits for completeness	0.00							
110									DAS
QC	Memo	0.00							02
Quality Control									9-89
									SEP 02 2015
120	Packaging	0.00							
120									DAS
Packaging	Memo	0.00							02
Packaging	Identify and pack for shipping as per PPP D412-775-013								9-89
	Location: _____								SEP 02 2015
	PPP Rev: _____								
130	QC21- Final Inspection - Work Order Release	0.00							
130									
QC	Memo	0.00							
Quality Control									

15/9/3

20150903

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube ☐</td> <td style="width:15%;">Crosstube ☐</td> <td style="width:15%;">Water Jet ☐</td> <td style="width:15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Picklist Print

March-26-15 1:45:19 PM

Page 1

Work Order ID: 131147

131147

Parent Item: D412-775-013

D412-775-013

Parent Item Name: Step Protective Trim

Start Date: 3/22/15

Required Date: 3/26/15

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A 08-12-10 new issue DD verified by:ec
kit DD 10.02.18 Verified By:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3608-1		Manufactured	No			110	Each	11.0000	1	1			

D3608-1

Lower Doubler

DAS
02
9-89

Location

Loc Qty

Loc Code

ST505

11

122733

3

128524

2

130504

6

D3608-3

Manufactured No

110

Each

4.0000

1

1

D3608-3

Upper Doubler

DAS
02
9-89

Location

Loc Qty

Loc Code

ST505

4

122616

2

127544

2

SEP 02 2015

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

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Material									
Operator									
Offset/Setup									
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Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear	General	Other	Other
☐ Bending	☐ Bend	☐ Folio/Program	☐ Outside Dimensions
☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance
☐ Cracks	☐ Broken/Damage/Defect	☐ Hardware	☐ Part Incorrect
☐ Crimp/Kink/Ripple/Wave	☐ Burrs	☐ Inspection Incomplete/Unqualified	☐ Part Lost/Missing
☐ Cuffs	☐ Contamination	☐ Instructions Incomplete/Unclear	☐ Part Moved
☐ Crushing	☐ Countersink	☐ Misaligned/off center	☐ Positioned Wrong
☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Power Loss/Surge
☐ Inspection Strip in Tube	☐ Drawing	☐ Misread	☐ Pressure/Forced
☐ Marks/Chatter	☐ Drill Holes	☐ Off-set	☐ Set-up
☐ Turning Sequence	☐ Finish	☐ Out of Calibration	☐ Temperature/Cure
☐ Wave/Twist in Tube	☐ Fit/Function	☐ Out of Sequence	☐ Weld
			☐ Wrong Stock Pulled
			☐ Other

DART SERVICE INSTRUCTION
TO AMEND INSTALLATION INSTRUCTIONS IIN-D412-775 REV. A
AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D412-775 REV. 0
REF. TCCA STC SH08-53
REF. FAA STC SR02692NY
REF. EASA STC EASA.IM.R.S.01529

131147MCS
1503-31
COPY
TO
OFFICE
OF THE
ATTORNEY
GENERAL

It has come to Dart's attention that due to variances in airframe, the D3608-1/-3 Lower/Upper Doublers of the D412-775-013 Step Protective Trim Kit at CHG 001 may not always fit as intended. To ensure proper fit, Dart has made changes to both D3608-1/-3 Doublers at CHG 002 and later. The manuals listed above are amended as follows:

IS:

INSTALLATION INSTRUCTIONS IIN-D412-775 REV. A, SECTION 3.2

3.2.5 Locate the D3608-1/-3 Doublers per Figure 3 and 4 and transfer drill #28 ($\varnothing 0.141"$) holes from the aircraft to the D3608-1/-3 Doublers. Bend tabs on D3608-1/-3 Doublers as shown in Figure 1 of this service instruction and trim rectangular opening as required to fit airframe.

NOTE: To avoid sharp edges or interference between the crew door, hinged panel door and step door assemblies, it is acceptable to trim the D3608-1/-3 Doublers to fit.

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D412-775 REV. 0, SECTION 53.4

53.4.2 Locate the D3608-1/-3 Doublers per Figure 53-2 and 53-3. If the D3608-1/-3 doublers are being replaced, transfer drill #28 ($\varnothing 0.141"$) holes from the aircraft to the D3608-1/-3 Doublers. Bend tabs on D3608-1/-3 Doublers as shown in Figure 1 of this service instruction and trim rectangular opening as required to fit airframe.

NOTE: To avoid sharp edges or interference between the crew door, hinged panel door and step door assemblies, it is acceptable to trim the D3608-1/-3 Doublers to fit.

WAS:

INSTALLATION INSTRUCTIONS IIN-D412-775 REV. A, SECTION 3.2

3.2.5 Locate the D3608-1/-3 Doublers per Figure 3 and 4 and transfer drill #28 ($\varnothing 0.141"$) holes from the aircraft to the D3608-1/-3 Doublers.

NOTE: To avoid sharp edges or interference between the crew door, hinged panel door and step door assemblies, it is acceptable to trim the D3608-1/-3 Doublers to fit.

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D412-775 REV. 0, SECTION 53.4

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NOTE: To avoid sharp edges or interference between the crew door, hinged panel door and step door assemblies, it is acceptable to trim the D3608-1/-3 Doublers to fit.

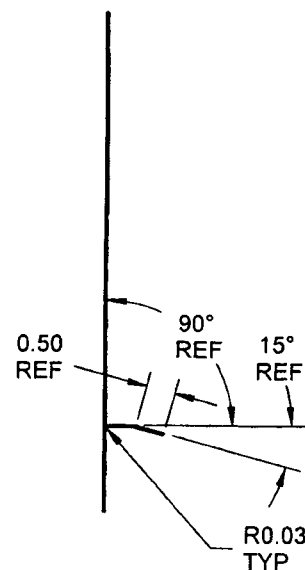
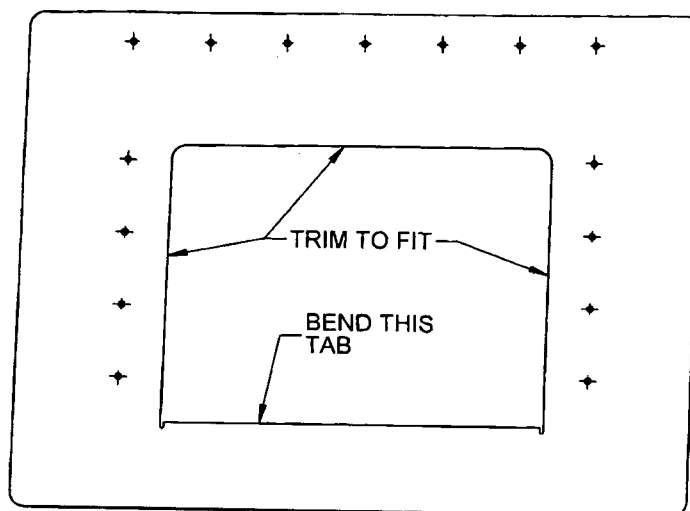
CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

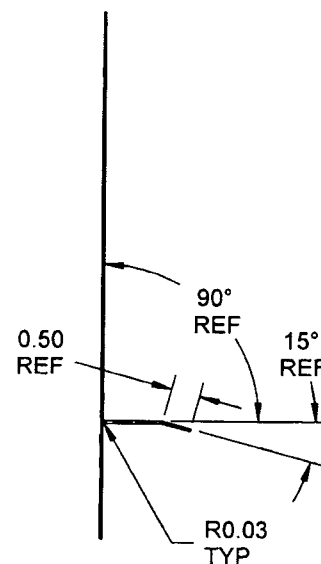
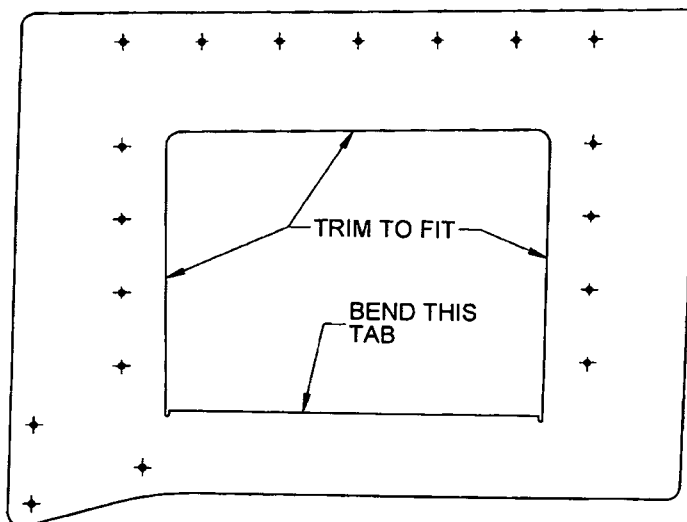
BY: 
D. SHEPHERD (DE # 02)

DATE: 10.02.05
CERT. NO.: SH08-53
ISSUE NO.: 1

A	NEW ISSUE	MB	10.02.05
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9503	SHEET 1 OF 2
APPROVED		TITLE	SCALE
DE APPR.		STEP PROTECTIVE TRIM CHG NTS	
DATE	10.02.05	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



D3608-3 BENT UPPER DOUBLER



D3608-1 BENT LOWER DOUBLER

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED
BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 10.02.05
CERT. NO.: SH08-53
ISSUE NO.: 1

FIGURE 1: TRIMMING/BENDING OF D3608-1/-3 DOUBLERS
(PARTS SHOWN PRIOR TO TRANSFER DRILLING)

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9503	SHEET 2 OF 2
APPROVED		TITLE	SCALE
DE APPR.		STEP PROTECTIVE TRIM CHG	NTS
DATE	10.02.05	COPYRIGHT © 2010 BY DART AEROSPACE LTD	
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Work Order ID 131147

March-26-15 1:45:19 PM

131147

To ship Sept 11

Page 1

Item ID: D412-775-013

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Item Name: Step Protective Trim

Stop ***NS2***

Start Date: 3/22/15 Start Qty: 1.00

1

Cust Item ID:

Required Date: 3/26/15 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: MLS Date: 15-03-31

Tooling:

Date:

Run Start ***NR1***

QC: _____ Date: _____

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
DSI 9503	A
IIN D412-775	Rev A

27
9-89

100 Document Control 0.00

100

DC

DOCUMENT CONTROL

Memo

0.00

Doc.Control -USB or Paperwork

Photocopy bluefile & type labels per PPP D412-775-013 CHG003

MLS

SEP 02 2015

105 Pick Kit 0.00

105

Packaging

Memo

0.00

Packaging

27
9-89

SEP 02 2015